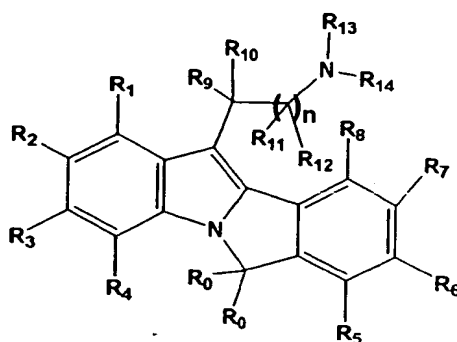


**Claims:**

1. A compound of the general formula (I),



**General Formula (I)**

its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts and solvates,

wherein R<sub>0</sub> is either hydrogen or linear or branched (C<sub>1</sub>-C<sub>2</sub>)alkyl;

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> may be same or different and each independently represent substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclylalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, alkylthio, aminocarbonylamino, dialkylaminocarbonylamino, carboxylic acid and its derivatives,

R<sub>13</sub> and R<sub>14</sub> may be same or different and each independently represents hydrogen, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>4</sub>)alkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, optionally R<sub>13</sub> and R<sub>14</sub> along with the nitrogen atom, may form a 3, 4, 5, 6 or 7-membered heterocyclic ring, wherein the ring may be further substituted, and it may have either one, two or three double bonds or "additional heteroatoms", as defined above; and  
"n" is an integer ranging from 1 to 6.8, preferably 1 to 4. The carbon chains which 'n' represents may be either linear or branched.

2. A compound according to Claim -1, which is selected from the group consisting of:

11-(2-N,N-Dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole;

2-Chloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole;

2-Chloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole hydrochloride salt;

5 2-Chloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole maleic acid salt;

2-Chloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole D,L-malic acid salt;

2-Chloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole oxalate salt;

2-Chloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole citrate salt;

2-Fluoro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole;

10 2-Chloro-11-(2-N,N-diethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole citrate salt;

2-Fluoro-11-(2-N,N-diethylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole;

2-Chloro-11-(2-N-cyclopropyl-N-methylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole citrate salt;

2-Fluoro-11-(2-N-cyclopropyl-N-methylaminoethyl)-6*H*-isoindolo[2,1-*a*]indole;

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- 11-(2-N,N-Dimethylaminoethyl)-2-methyl-6*H*-isoindolo[2,1-a]indole;  
11-(2-N,N-Dimethylaminoethyl)-2-methoxy-6*H*-isoindolo[2,1-a]indole;  
2-Bromo-11-(2-N,N-diethylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
2-Bromo-11-(2-N-methyl-N-cyclopropylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
5 4-Chloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
3,4-Dichloro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
1-Chloro-11-(2-N,N-dimethylaminoethyl)-4-methyl-6*H*-isoindolo[2,1-a]indole;  
3-Chloro-11-(2-N,N-dimethylaminoethyl)-4-methyl-6*H*-isoindolo[2,1-a]indole;  
3-Chloro-11-[(2-N-methylamino)ethyl]-4-methyl-6*H*-isoindolo[2,1-a]indole;  
10 3-Chloro-11-[(2-N-methyl-N-acetylamino)ethyl]-4-methyl-6*H*-isoindolo[2,1-a]indole;  
3-Chloro-11-[(2-N-methylamino)ethyl]-2-methoxy-6*H*-isoindolo[2,1-a]indole;  
3-Chloro-11-[(2-N-methylamino)ethyl]-2-sulfoamido-6*H*-isoindolo[2,1-a]indole;  
3-Iodo-11-[(2-N-methylamino)ethyl]-2-methoxy-6*H*-isoindolo[2,1-a]indole;  
11-(2-N,N-Dimethylaminoethyl)-4-trifluoromethyl-6*H*-isoindolo[2,1-a]indole;  
15 2,4-Difluoro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
11-(2-Pyrrolidin-1-ylethyl)-6*H*-isoindolo[2,1-a]indole;  
2-Bromo-11-(2-pyrrolidin-1-ylethyl)-6*H*-isoindolo[2,1-a]indole;  
11-(2-(Piperidin-1-yl)ethyl)-6*H*-isoindolo[2,1-a]indole;  
11-(2-(4-Methylpiperazin-1-yl)ethyl)-6*H*-isoindolo[2,1-a]indole;  
20 11-(3-(Pyrrolidin-1-yl)-1-hydroxyprop-1-yl)-6*H*-isoindolo[2,1-a]indole;  
2-Bromo-11-(3-(piperidin-1-yl)-1-hydroxyprop-1-yl)-6*H*-isoindolo[2,1-a]indole;  
11-(2-N,N-Dimethylaminoethyl)-4-ethyl-6*H*-isoindolo[2,1-a]indole;  
11-(2-N,N-Dimethylamino-1-hydroxyethyl)-6*H*-isoindolo[2,1-a]indole;  
11-(2-N,N-Dimethylaminoethyl)-4-methoxy-6*H*-isoindolo[2,1-a]indole;  
25 2-Bromo-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
4-Bromo-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
4-Fluoro-11-(2-N,N-dimethylaminoethyl)-6*H*-isoindolo[2,1-a]indole;  
2-Bromo-11-(2-(4-methylpiperazin-1-yl)ethyl)-6*H*-isoindolo[2,1-a]indole; and  
its stereoisomers, its N-oxides, its polymorphs, its pharmaceutically acceptable salts and  
30 solvates.
3. A pharmaceutical composition comprising either of a pharmaceutically acceptable  
carrier, diluent/s, excipient/s or solvates along with a therapeutically effective amount  
of a compound according to Claim-1, its derivatives, its analogs, its tautomeric forms,  
35 its stereoisomers, its geometric forms, its N-oxides, its polymorphs, its  
pharmaceutically acceptable salts, or solvates.

4. A pharmaceutical composition according to Claim-3, in the form of a tablet, capsule, powder, lozenges, suppositories, syrup, solution, suspension or injectable, administered in, as a single dose or multiple dose units.
- 5 5. Use of compound of general formula (I), as defined in Claim-1 or a pharmaceutical composition as defined in Claim-3 for preparing medicaments.
6. Use of compound of general formula (I), as defined in Claim-1 or a pharmaceutical composition as defined in Claim-3 for the treatment where a modulation of 5-HT melatonin activity is desired.
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7. Use of a compound as claimed in Claim-1 for the manufacture of a medicament for the treatment and/or prevention of clinical conditions for which a selective action on 5-HT receptors is indicated.
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8. Use of a compound as claimed in Claim-1 for the treatment and/or prevention of clinical conditions such as anxiety, depression, convulsive disorders, obsessive-compulsive disorders, migraine headache, cognitive memory disorders, ADHD (Attention Deficient Disorder/ Hyperactivity Syndrome), personality disorders, psychosis, paraphrenia, psychotic depression, mania, schizophrenia, schizophreniform disorders, withdrawal from drug abuse, panic attacks, reproduction, glaucoma, sleep disorders and also disorders associated with spinal trauma and /or head injury.
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9. Use of a compound as claimed in Claim-1 for the treatment of mild cognitive impairment and other neurodegenerative disorders like Alzheimer's disease, Parkinsonism and Huntington's chorea.
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10. Use of a compound as claimed in Claim-1 for the treatment of certain GI (Gastrointestinal) disorders such as IBS (Irritable bowel syndrome) or chemotherapy induced emesis.
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11. Use of a compound as claimed in Claim-1 to reduce morbidity and mortality associated with the excess weight.
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12. Use of a radiolabelled compound as claimed in Claim-1, as a diagnostic tool for modulating 5-HT receptor function.

13. Use of a compound as claimed in Claims 1 in combination with a 5-HT re-uptake inhibitor, and / or a pharmaceutically acceptable salt thereof.

14. A compound of the general formula (1), its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts and its pharmaceutically acceptable solvates for preparing a medicament.

15. A method for the treatment and/or prophylaxis of clinical conditions such as anxiety, convulsive disorders, obsessive-compulsive disorders, migraine headache, cognitive memory disorders, ADHD (Attention Deficient Disorder/ Hyperactivity Syndrome), personality disorders, psychosis, paraphrenia, psychotic depression, mania, schizophrenia, schizophreniform disorders, withdrawal from drug abuse, panic attacks, reproduction, glaucoma, sleep disorders and also disorders associated with spinal trauma and /or head injury which comprises administering to a patient in need thereof, an effective amount of a compound of general formula (I) as claimed in Claim-1.

16. A method for the treatment and/or prophylaxis of mild cognitive impairment and other neurodegenerative disorders like Alzheimer's disease, Parkinsonism and Huntington's chorea which comprises administering to a patient in need thereof, an effective amount of a compound of general formula (I) as claimed in Claim-1.

17. A method for the treatment of certain GI (Gastrointestinal) disorders such as IBS (Irritable bowel syndrome) or chemotherapy induced emesis using a compound of general formula (I) as claimed in Claim-1.

18. A method to reduce morbidity and mortality associated with the excess weight using a compound of general formula (I) as claimed in Claim-1.

19. Use of a compound as claimed in Claims 1 and/or Claim 28, in combination with either of 5-HT re-uptake inhibitor, Melatonin or Melatoninergic modulator, and / or their pharmaceutically acceptable salts so as to achieve desired therapeutic benefit.

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